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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.            | CONFIRMATION NO. |
|--|-------------|----------------------|--------------------------------|------------------|
| 09/985,890   | 11/06/2001  | Hajime Tabata        | 0505-0912P                     | 4543             |
| 2292   | 7590        | 07/05/2005           |                                |                  |
| BIRCH STEWART KOLASCH & BIRCH<br>PO BOX 747<br>FALLS CHURCH, VA 22040-0747 |             |                      | EXAMINER<br>PENDLETON, BRIAN T |                  |
|  |             |                      | ART UNIT                       | PAPER NUMBER     |
|  |             |                      | 2644                           |                  |

DATE MAILED: 07/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                       |                                      |  |
|------------------------------|---------------------------------------|--------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>09/985,890  | <b>Applicant(s)</b><br>TABATA ET AL. |  |
|                              | <b>Examiner</b><br>Brian T. Pendleton | <b>Art Unit</b><br>2644              |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-16, 18-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21 and 22 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-13 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 4, 14-16 and 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: <u>1/24/05; 6/2/05</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Terminal Disclaimer***

The terminal disclaimer filed on 3/31/05 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of co-pending US Patent Application 09/949,804 has been reviewed and is accepted. The terminal disclaimer has been recorded. As a result, the obviousness-type double patenting rejection is withdrawn. Applicant's arguments did not precipitate the withdrawal of the rejection.

### ***Response to Arguments***

Applicant's arguments filed 3/31/05 have been fully considered but they are not persuasive.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant states that Sekimori does not disclose that the magnetic side socket of the magnetic connector is provided in the helmet and that the magnetic body side socket of the magnetic connector is provided in the connecting cable. However, Sekimori is not relied upon for those teachings. Sekimori is relied upon to teach the magnetic structure and suggesting the advantage of using a magnetic structure for electrical connections with the advantages of an easy disconnecting operation and not damaging terminal connections. It is the Examiner's contention that it would have been obvious to use the Sekimori connector in the Lazzeroni apparatus.

Furthermore, the claim deficiencies are met by Slater which discloses communicating voices in which a relatively large physiological sound is not transmitted.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-13 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lazzeroni et al, US Patent Application Publication 2002/0176595 in view of Sekimori et al, US Patent 5,816,825 in further view of Slater, US Patent 5,774,557. Lazzeroni discloses a clampless headset mounting assembly for attaching a communication device comprising a socket 14 mounted on a helmet, a socket 20 for detachably connecting to the socket 14, a connecting cable 18 and a communications unit 22. Lazzeroni does not disclose that the socket has a magnet side on the helmet and a magnet body side on the connecting cable. Sekimori discloses a connector unit provided with magnetically locking mechanism comprising male connector 1, magnetic substance 3 and female connector 2. The benefit of the connector unit was to provide a connecting terminal which could be locked with a strong magnet, but easily disconnected. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use the connector unit of Sekimori in the apparatus of Lazzeroni and incorporate a magnet side socket on the helmet and a magnet body side on the connecting cable. The combination does not disclose that the communication unit does not transmit a large physiological sound. Slater

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discloses an autotracking microphone squelch for aircraft intercom systems comprising microphone 16, switch 14, audio detector 34 and timer 46. Column 3 lines 41-63 disclose that the system has the capability to prevent squelch falsing or transmitting the sound of noise. A physiological sound would have qualified as undesirable noise. Thus, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the circuitry of Slater in the combination of Lazzeroni and Sekimori for the purpose of improving the sound quality of the communication unit. Claims 1-3, 5, 8, 9, 19 and 20 are met. Per claim 6, it was obvious to high pass filter the signal, as those signals represented the vocal range used in voice operated communication systems. As to claim 7, the combination provides for a mute terminal in the form of switch 14. Regarding claims 10-12, Slater discloses a threshold which is adjusted according to environmental conditions, the threshold acting as the reference point where communication voices are heard or not transmitted. Per claim 13, it would have been obvious to one of ordinary skill in the art at the time of invention to select a five second delay for the purpose of ensuring that incoming audio from a microphone is speech and is not inadvertently cut off during pauses in speech. Regarding claim 18, Slater discloses a sensitivity switch 41 for adjusting the reference value for gating the voice signals. As one of ordinary skill in the art would have known, voice operated systems have three parameters – a signal level, delay time, and amplification level of the gated signal. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to also provide operating switches for delay time and amplification level in order to provide flexibility to the system.

***Allowable Subject Matter***

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Claims 4, 14-16, and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 21 and 22 are allowed.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Pendleton whose telephone number is (571) 272-7527. The examiner can normally be reached on M-F 7-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571) 272-7564. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian T. Pendleton  
Examiner  
Art Unit 2644



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